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WAC 296-874-200

## Rule

#### WAC 296-874-20002

#### Make sure scaffolds are properly designed and constructed

#### You must

- Make sure scaffolds are:
  - Designed by a qualified person and
  - Constructed according to that design.
- Prohibit the use of shore and lean-to scaffolds.



#### Definition:

- A qualified person is one who has demonstrated the ability to solve problems related to the subject matter, work, or project. This can be done by having either:
  - A recognized degree, certificate, or professional standing or
  - Extensive knowledge, training, and experience.

#### WAC 296-874-20004

# Make sure scaffolds are erected, moved, altered, or dismantled by appropriate persons

#### You must

- Make sure scaffolds are erected, moved, altered, or dismantled only when the work is:
  - Supervised and directed by a competent person qualified in scaffold erections, moving, dismantling or alteration

#### and

 Done by experienced and trained employees selected by the competent person.



WAC 296-874-200

#### Rule

#### WAC 296-874-20004 (Continued)

#### You must



#### **Definition:**

- A *competent person* is someone who:
  - Is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees

#### and

 Has the authority to take prompt corrective measures to eliminate them.

#### WAC 296-874-20006

#### Maintain structural integrity when intermixing scaffold components

#### You must

- Make sure intermixed scaffold components:
  - Fit together without force

#### and

- Maintain the scaffold's structural integrity.
- Make sure a qualified person determines that modifying components in order to intermix them will result in a structurally sound scaffold.
- Make sure scaffold components made of different metals aren't used together.



#### **Exemption:**

 Different types of metals may be used together if a competent person determines that galvanic action won't reduce the strength of any component to less than the minimum strength required.

Rule

#### WAC 296-874-20006 (Continued)

#### You must



#### Reference:

- ➤ The minimum strength requirements are found in the following sections:
  - Suspended Scaffolds, WAC 296-874-30002
  - Supported Scaffolds, WAC 296-874-40002.

#### WAC 296-874-20008

#### Make sure platforms are properly planked or decked

#### You must

- Fully plank or deck each platform between the front uprights and the guardrail supports on all working levels of a scaffold so that there's no more than one inch (2.5 cm):
  - Between adjacent units

#### and

- Between the platform and the uprights.



#### Exemption:

- There may be more than one inch between platform units if all of the following are met:
  - You can demonstrate that a wider space is necessary, such as to fit around uprights when side brackets are used to extend the platform width
  - The platform is planked or decked as fully as possible
  - The open space between the platform and the guardrail supports is 9-1/2 inches (24.1 cm) or less.
- Platforms used solely as walkways or only by employees erecting or dismantling scaffolds, don't have to be fully decked or planked if:
  - The planking provided makes for safe working conditions
  - Employees on those platforms are protected from falling.



## Rule

WAC 296-874-20008 (Continued)

#### You must



#### Reference:

Fall protection requirements for employees	Are located in the following chapters	In the following sections
On walkways within scaffolds	Chapter 296-874, WAC Scaffolds	WAC 296-874-20056
Erecting or dismantling supported scaffolds	Chapter 296-874, WAC Scaffolds	WAC 296-874-40010
Erecting or dismantling suspended scaffolds in general industry	Chapter 296-24, WAC General Safety and Health Standards	Part J-1, Working Surfaces, Guarding Floors and Wall Openings, Ladders and Part J-3, Powered Platforms
Erecting or dismantling suspended scaffolds in construction work	Chapter 296-155, WAC Safety Standards for Construction Work	Part C-1, Fall Restraint and Fall Arrest and Part K, Floor Openings, Wall Openings, and Stairways

#### You must

Make sure wood platforms aren't covered with an opaque finish.



#### Exemption:

• Platform edges may be covered or marked for identification.



#### Note:

> Platforms may be coated periodically with wood preservatives, fire-retardant finishes, or slip-resistant finishes if the coating doesn't obscure the top or bottom wood surfaces.

## Rule

#### WAC 296-874-20010

#### Make sure platforms meet minimum width requirements

#### You must

Make sure scaffold platforms meet the minimum width requirements of Table 1, Minimum Platform Width.

#### Table 1 **Minimum Platform Width**

Type of scaffold	Minimum platform width required	
<ul><li>Ladder jack scaffold</li><li>Pump jack scaffold</li><li>Roof bracket scaffold</li><li>Top plate bracket scaffold</li></ul>	12 inches (20 cm)	
Boatswain's chair	No minimum width	
All other scaffolds	Exemption:  Platforms and walkways may be less than 18 inches (46 cm) wide if all of the following are met:  You can demonstrate that the area is so narrow that the platform or walkway can't be at least 18 inches (46 cm) wide  The platform or walkway is as wide as feasible  Employees on those platforms or walkways are protected from falling by using guardrails or personal fall arrest systems	

## Rule

#### WAC 296-874-20012

#### Meet these requirements when using shorter platforms to create a longer platform

#### You must

- Make sure, when platforms are overlapped to create a longer platform, that:
  - The overlap is over a support

#### and

- The platforms are either:
  - Overlapped by at least 12 inches (30 cm)

- Are nailed together or otherwise prevented from moving.
- Make sure, when platforms are butted together to create a longer platform, that each abutted platform end rests on a separate support surface.



#### Note:

- > Platforms may but together on a common support member if the member is designed to support abutting platforms, such as either:
  - A "T" section

Hook-on platforms designed to rest on common supports.

#### WAC 296-874-20014

#### Lay platform planks properly when the platform changes direction

- Do the following whenever platforms overlap to change direction:
  - First lay the platform that rests on a bearer at an angle other than a right angle then
  - Lay the platform that's perpendicular to the bearer.



## Rule

#### WAC 296-874-20016

#### Stabilize the ends of platforms

#### You must

- Make sure each end of a platform:
  - Is cleated or restrained by hooks or equivalent means

or

- Extends over the centerline of its support at least 6 inches (15 cm).
- Make sure the cantilevered portion of a platform meets at least one of the following:
  - Is designed and installed to support employees or material without tipping
  - Has guardrails which block employee access to the cantilevered end
  - Extends over its support not more than:
    - 12 inches (30 cm) if the platform length is 10 feet or less or
    - 18 inches (46 cm) if the platform length is greater than 10 feet.



#### Note:

The cantilevered portion of a platform is the portion that isn't supported on one end.

#### WAC 296-874-20018

#### Keep platform sag within acceptable limits

#### You must

Make sure a loaded platform doesn't sag more than 1/60 of the span.

## Rule

#### WAC 296-874-20020

#### Provide safe access to scaffolds

#### You must

- Provide scaffold platforms more than 2 feet (0.6 m) above or below a point of access with at least one of the following means of access:
  - Portable, hook-on, or attachable ladder
  - Stairway-type ladder
  - Ladder stand
  - Stair tower (scaffold stairway or tower)
  - Ramp
  - Walkway
  - Integral prefabricated scaffold access
  - Direct access from another scaffold, structure, personnel hoist, or similar surface.
- Make sure crossbraces aren't used as a means of access.



#### Reference:

For requirements about integral prefabricated scaffold access, go to WAC 296-874-40020.



## Rule

#### WAC 296-874-20022

#### Make sure portable, hook-on, and attachable ladders meet these requirements

- Position portable, hook-on, and attachable ladders so they don't tip the scaffold.
- Make sure hook-on and attachable ladders meet **all** of the following:
  - Specifically designed and used for that type of scaffold
  - Have rungs that are:
    - Uniformly spaced
    - Not more than 16-3/4 inches apart
    - At least 11-1/2 inches (29 cm) long
    - Lined up vertically between rest platforms.
- Position the bottom rung not more than 24 inches (61 cm) above the scaffold supporting level.
- Have rest platforms at vertical intervals not greater than 24 feet (7.3m) on supported scaffolds.



## Rule

#### WAC 296-874-20024

#### Make sure stairway-type ladders meet these requirements

#### You must

- Make sure stairway-type ladders meet all of the following:
  - Position the bottom step not more than 24 inches (61 cm) above the scaffold supporting level
  - Have rest platforms not more than 12 feet (3.7 m) apart vertically
  - Have slip-resistant surfaces on treads and landings
  - Have steps that:
    - Are at least 16 inches (41 cm) wide

#### and

- Line-up vertically between rest platforms.
- Make sure mobile ladder stands have steps that are at least 11-1/2 inches (30 cm) wide.



#### Definition:

• A ladder stand is a mobile, fixed-size, self-supporting ladder consisting of a wide flat tread ladder in the form of stairs.

WAC 296-874-200

## Rule

#### WAC 296-874-20026

#### Make sure stair towers meet these requirements

#### You must

- Make sure stair towers (scaffold stairways or towers) meet all of the following:
  - Are positioned so the bottom step isn't more than 24 inches (61 cm) above the scaffold supporting level
  - Are at least 18 inches (45.7 cm) wide between stair rails
  - Have slip-resistant surfaces on treads and landings
  - Are installed at an angle of 40 to 60 degrees from the horizontal.
- Provide a landing platform at least 18 inches (45.7 cm) wide by 18 inches (45.7 cm) long at each level.
- Provide guardrails on the open sides and ends of each landing.



#### Reference:

For requirements about guardrails, go to WAC 296-874-20064.

#### You must

- Make sure steps meet all of the following requirements:
  - Line-up vertically between rest platforms
  - Have uniform tread depth, within 1/4 inch (0.6 cm), for each flight of stairs
  - Have uniform riser height, within 1/4 inch (0.6 cm), for each flight of stairs.



#### Note:

➤ Riser height may have larger variations at the top step and bottom step of the entire stair system, but not at the top and bottom steps within each flight of stairs.

General

WAC 296-874-200

## Rule

#### WAC 296-874-20028

#### Make sure stair rails and handrails meet these requirements

#### You must

- Provide a stair rail that meets all of the following on each side of a scaffold stairway:
  - Has a toprail and midrail
  - Has a toprail that can serve as a handrail if a separate handrail isn't provided
  - Is at least 28 inches (71 cm) but not more than 37 inches (94 cm) high.



#### Note:

Stair rail height is measured from the upper surface of the stair rail to the surface of the tread, in line with the face of the riser at the forward edge of the tread.

#### You must

- Make sure stair rail systems and handrails have:
  - A surface that prevents employees from:
    - Being injured by punctures or lacerations

#### or

- Snagging their clothing.
- Ends that don't create a projection hazard.
- Make sure handrails, and top rails that are used as handrails:
  - Provide an adequate handhold for employees to grasp to avoid falling and
  - Are at least 3 inches (7.6 cm) from other objects.



WAC 296-874-200

## Rule

#### WAC 296-874-20030

# Make sure ramps and walkways used to access scaffolds meet these requirements

#### You must

- Make sure ramps and walkways aren't inclined at a slope steeper than one vertical in 3 horizontal (1:3 or 20 degrees from the horizontal).
- Make sure ramps and walkways that are inclined at a slope steeper than one vertical in 8 horizontal (1:8) have cleats to provide footing which are:
  - Securely fastened to the planks

#### and

Spaced not more than 14 inches (35 cm) apart.



#### Reference:

- Ramps and walkways that are 4 feet (1.2 m) or more above a lower level need to have a guardrail system. Those requirements are found in other chapters.
  - For general industry activities, go to:
    - Working Surfaces, Guarding Floors and Wall Openings, Ladders, Part J-1, in the General Safety and Health Standards, Chapter 296-24 WAC
  - For construction activities, go to:
    - Floor Openings, Wall Openings, and Stairways, Part K, in the Safety Standards for Construction Work, Chapter 296-155 WAC.



## Rule

#### WAC 296-874-20032

Make sure surfaces used to access scaffolds are close enough to use safely

#### You must

- Make sure a surface used to provide access to or from a scaffold isn't further from the scaffold than:
  - 14 inches (36 cm) horizontally
  - 24 inches (61 cm) vertically.

#### WAC 296-874-20034

#### Inspect scaffolds and scaffold components

#### You must

- Make sure scaffolds and scaffold components are inspected for visible defects by a competent person:
  - Before each work shift

#### and

- After anything occurs that could affect the scaffold's structural integrity.

WAC 296-874-200

## Rule

#### WAC 296-874-20036

# Make sure damaged or weakened scaffolds meet minimum strength requirements

#### You must

- Make sure any scaffold or scaffold component that's been damaged or weakened so that it no longer meets the minimum strength requirements of this chapter, is immediately either:
  - Repaired, replaced, or braced to meet the minimum strength requirements
     or
  - Removed from service until repaired.



#### Reference:

- For information on minimum strength requirements for suspended and supported scaffolds, go to the following sections within this chapter:
  - Make sure suspended scaffolds and suspended components meet these strength requirements, WAC 296-874-30002
  - Make sure supported scaffolds and supported components meet these strength requirements, WAC 296-874-40002.

#### WAC 296-874-20038

#### Make sure scaffolds are properly loaded

#### You must

- Load scaffolds as specified in the:
  - Manufacturer's instructions

or

- Design of the qualified person.
- Make sure scaffolds and scaffold components don't exceed their maximum intended load or rated load, whichever is less.



WAC 296-874-200

#### Rule

#### WAC 296-874-20040

#### Protect employees when moving scaffolds

#### You must

• Make sure scaffolds aren't moved horizontally while employees are on them.



#### **Exemption:**

- A scaffold may be moved horizontally with employees on it if the scaffold:
  - Has been specifically designed for such movement by a registered professional engineer

or

 Is a mobile scaffold that meets the requirements of the section, Meet these requirements when moving mobile scaffolds, WAC 296-874-40012.

#### WAC 296-874-20042

#### Increase employee working level height on scaffolds safely

#### You must

- Make sure makeshift devices, such as boxes and barrels, aren't used on scaffold platforms to increase the working level height for employees.
- Meet all of the following when using stilts on scaffolds:
  - Use stilts only on large area scaffolds
  - Increase the height of a guardrail system used for fall protection by an amount equal to the height of the stilts being used.



WAC 296-874-200

## Rule

#### WAC 296-874-20042 (Continued)

#### You must

- Make sure scaffold platforms where stilts are used are flat and free of:
  - Pits, holes, and obstructions such as debris

#### and

- Other tripping or falling hazards.
- Make sure stilts are:
  - Properly maintained

#### and

- The original equipment isn't altered without the manufacturer's approval.
- Meet all of the following when using ladders on scaffolds:
  - Use ladders only on large area scaffolds
  - Secure the platform units to the scaffold to prevent movement
  - Secure the scaffold against the sideways thrust exerted by the ladder if the ladder is placed against a structure that's not part of the scaffold
  - Make sure the ladder legs are:
    - Secured to prevent them from slipping or being pushed off the platform

#### and

• On the same scaffold platform, or use other means, to stabilize the ladder against uneven platform deflection.



## Rule

#### WAC 296-874-20044

#### Control loads being hoisted near scaffolds

#### You must

 Use a tag line or equivalent measures to control loads being hoisted onto or near a scaffold if the load could swing and contact the scaffold.

#### WAC 296-874-20046

#### Protect employees from energized power lines

#### You must

Make sure scaffolds are erected, moved, altered, or dismantled so that they, and any conductive material handled on them, are kept at least as far from exposed and energized power lines as shown in Table 2, Minimum Separation Distance from Energized Power Lines.

Table 2 Minimum Separation Distance from Energized Power Lines

Voltage	Minimum Separation Distance
Less than 300 volts (insulated lines)	3 feet (0.9 m)
Less than 300 volts (uninsulated lines)	10 feet (3.1 m)
300 volts to 50 kv.	10 feet (3.1 m)
More than 50 kv	10 feet (3.1 m) + 0.4 inches (1.0 cm) for each 1 kv over 50 kv.  Note:  You may use alternative minimum separation distance of 2 times the length of the line insulator, but never less than 10 feet (3.1 m).

Rule

#### WAC 296-874-20046 (Continued)

#### You must



#### **Exemption:**

- Scaffolds and conductive materials handled on scaffolds may be closer to power lines than the minimum separation distance specified in Table 2 if all of the following are met:
  - Less clearance is necessary to do the work
  - The utility company or electrical system operator has been notified of the need to work closer to the power lines
  - The utility company or electrical system operator has done at least one of the following:
    - De-energized the lines
    - Relocated the lines to meet the minimum separation distance requirement
    - Installed protective coverings over the lines to prevent accidental contact.

#### WAC 296-874-20048

#### Protect employees from weather hazards

#### You must

- Prohibit work on or from scaffolds during storms or high winds unless both of the following are met:
  - A competent person has determined that it's safe for employees to be on the scaffold
  - The employees are protected by either:
    - A personal fall arrest system

or

- · Windscreens.
- Make sure wind screens aren't used unless the scaffold is secured against the anticipated wind forces.

nts General

WAC 296-874-200

#### Rule

#### WAC 296-874-20050

#### Protect employees from slipping and tripping hazards

#### You must

- Make sure debris doesn't accumulate on platforms.
- Prohibit employees from working on scaffolds covered with snow, ice, or other slippery material.



#### Exemption:

• Employees may be on scaffolds as necessary to remove the slipping hazard.

#### WAC 296-874-20052

#### Provide fall protection for employees on scaffolds

#### You must

- Protect each employee on a scaffold more than 10 ft. (3.1 m) above a lower level, from falling to the lower level, by providing either:
  - A personal fall arrest system

or

- Guardrails.



## Rule

#### WAC 296-874-20052 (Continued)

#### You must

Make sure employees erecting the scaffold install the guardrail system, if required, before the scaffold is used by any other employees.



#### Reference:

Fall protection requirements for employees	Are located in the following chapters	In the following sections
On walkways within scaffolds	Chapter 296-874, WAC Scaffolds	WAC 296-874-20056
Erecting or dismantling supported scaffolds	Chapter 296-874, WAC Scaffolds	WAC 296-874-40010
Erecting or dismantling suspended scaffolds in general industry	Chapter 296-24, WAC General Safety and Health Standards	Part J-1 Working Surfaces, Guarding Floors and Wall Openings, Ladders and Part J-3 Powered Platforms
Erecting or dismantling suspended scaffolds in construction work	Chapter 296-155, WAC Safety Standards for Construction Work	Part C-1 Fall Restraint and Fall Arrest and Part K Floor Openings, Wall Openings, and Stairways

#### WAC 296-874-20054

#### Provide fall protection if a scaffold is too far from the work face

- Provide a guardrail system along the front edge of the platform, or have employees use a personal fall arrest system, if the distance from the front edge of the platform to the work face is greater than:
  - 18 inches (46 cm) for scaffolds used for plastering and lathing operations.
  - 14 inches (36 cm) for all other scaffolds

## Rule

#### WAC 296-874-20056

#### Provide specific fall protection for specific types of scaffolds

#### You must

- Use a personal fall arrest system to protect employees on the following scaffolds:
  - Boatswain's chair
  - Catenary scaffold
  - Float scaffold
  - Ladder jack scaffold
  - Needle beam scaffold.
- Use a personal fall arrest system **and** a guardrail system to protect employees on:
  - Single-point adjustable suspension scaffolds and
  - Two-point adjustable suspension scaffolds.
- Protect employees working on a crawling board (chicken ladder) by using at least one of the following:
  - A personal fall arrest system
  - A guardrail system with a minimum 200 lb. toprail capacity
  - A 3/4 inch (1.9 cm) diameter grabline or equivalent handhold securely fastened beside each crawling board.
- Protect employees working on a self-contained adjustable scaffold that has the platform:
  - Supported by the frame structure, using a guardrail system with a minimum 200 lb. toprail capacity.
  - Suspended by ropes, using:
    - A guardrail system with a minimum 200 lb. toprail capacity and
    - A personal fall arrest system.

WAC 296-874-200

## Rule

#### WAC 296-874-20056 (Continued)

#### You must

- Protect employees on walkways located within a scaffold by using a guardrail system that meets all of the following:
  - Has a minimum 200 lb. toprail capacity
  - Is installed within 9-1/2 inches (24.1 cm) of the walkway
  - Is installed along at least one side of the walkway.

#### WAC 296-874-20058

#### Make sure personal fall arrest systems meet these requirements

#### You must

- Make sure personal fall arrest systems used on scaffolds for general industry activities, meet the requirements of Personal Fall Arrest System, Appendix C, Part 1, WAC 296-24-88050, in Powered Platforms, Part J-3, found in General Safety and Health Standards, Chapter 296-24, WAC.
- Make sure personal fall arrest systems are attached by a lanyard to one of the following:
  - Vertical lifeline
  - Horizontal lifeline
  - Appropriate structural member of the scaffold



#### Reference:

Requirements for personal fall arrest systems used on scaffolds for construction activities are in Fall Restraint and Fall Arrest, Part C-1, found in Safety Standards for Construction Work, Chapter 296-155, WAC.



WAC 296-874-200

## Rule

#### WAC 296-874-20060

# Make sure vertical lifelines used with personal fall arrest systems meet these requirements

#### You must

- Make sure vertical lifelines are all of the following:
  - Fastened to a fixed, safe point of anchorage
  - Independent of the scaffold
  - Protected from sharp edges and abrasion.



#### Note:

- Safe points of anchorage include structural members of buildings, but do **not** include:
  - Standpipes, vents, or other piping systems
  - Electrical conduit
  - Outrigger beams
  - Counterweights

- Make sure vertical lifelines, independent support lines, and suspension ropes are not attached to any of the following:
  - Each other
  - The same point of anchorage
  - The same point on the scaffold.
- Make sure vertical lifelines, independent support lines, and suspension ropes don't use the same point of anchorage.
- Make sure independent support lines and suspension ropes aren't attached to a personal fall arrest system.
- Make sure vertical lifelines aren't used with single-point or two-point adjustable suspension scaffolds that have overhead components such as overhead protection or additional platform levels.



# Requirements

## **General Requirements for Scaffolds**

WAC 296-874-200

## Rule

#### WAC 296-874-20062

# Make sure horizontal lifelines used with personal fall arrest systems meet these requirements

#### You must

- Equip single-point or two-point adjustable suspension scaffolds that use horizontal lifelines or structural members of the scaffold for fall protection with both of the following:
  - Additional independent support lines that are equal in number and equivalent in strength to the suspension ropes
  - Automatic locking devices capable of stopping the scaffold from falling if one or both of the suspension ropes fail.
- Make sure horizontal lifelines are secured to either:
  - Two or more structural members of the scaffold

or

- Looped around both the suspension ropes and independent support lines above the hoist and brake attached to the end of the scaffold.
- Make sure independent support lines and suspension ropes are not:
  - Attached to each other or the same point on the scaffold
  - Attached to or use the same point of anchorage.
- Make sure independent support lines and suspension ropes aren't attached to either:
  - A personal fall arrest system

or

- The same point on the scaffold as a personal fall arrest system.
- Make sure, if a horizontal lifeline is used where it may become a vertical lifeline, that
  the device used to connect a lanyard to the horizontal lifeline is capable of locking
  in both directions on the lifeline.

neral rements

## Rule

#### WAC 296-874-20064

#### Make sure guardrail systems meet these requirements

#### You must

Make sure guardrails, if required, are installed along all open sides and ends of platforms.



#### **Exemption:**

 For employees doing overhand bricklaying operations from a supported scaffold, a guardrail isn't required on the side next to the wall.



#### Definition:

• *Overhand bricklaying* is the process of laying bricks and masonry units so that the surface of the wall is on the opposite side of the wall from the mason, requiring the mason to lean over the wall to complete the work. It includes mason tending and electrical installation incorporated into the brick wall.

#### You must

- Make sure the height of the toprail top edge, or the equivalent member, of supported scaffolds is:
  - At least 36 inches (0.9 m) and not more than 45 inches (1.2 m) above the platform surface for scaffolds manufactured or first placed in service before **January 1, 2000**
  - At least 38 inches (0.97 m) and not more than 45 inches (1.2 m) above the platform surface for scaffolds manufactured or first placed in service after **January 1, 2000**.
- Make sure the height of the toprail top edge, or the equivalent member, of suspended scaffolds that require guardrails and personal fall arrest systems, is at least 36 inches (0.9 m) and not more than 45 inches (1.2 m) above the platform surface.

#### Rule

#### WAC 296-874-20064 (Continued)



#### **Exemption:**

 When conditions warrant, the height of the top edge of the toprail may be greater than 45 inches if the guardrail system meets all other criteria of this chapter.

#### You must

- Make sure the top edge of the toprail doesn't drop below the required height when the minimum load, shown in Table 3, Minimum Toprail and Midrail Strength Requirements, is used.
- Each toprail and midrail, or equivalent member, of a guardrail system must be able to withstand, without failure, the force shown in Table 3, Minimum Toprail and Midrail Strength Requirements, when the force is applied as follows:
  - To the toprail in a downward or horizontal direction at any point along its top edge
  - To the midrail in a downward or horizontal direction at any point.



#### Note:

Midrail includes screens, mesh, intermediate vertical members, solid panels, and equivalent structural members of the guardrail system.



#### Rule

#### WAC 296-874-20064 (Continued)

Table 3 Minimum Toprail and Midrail Strength Requirements

Type of Scaffold	Toprail Capacity	Midrail Capacity
<ul> <li>Single-point adjustable suspension scaffolds</li> <li>Two-point adjustable suspension scaffolds</li> </ul>	100 lbs. (445 n)	75 lbs. (333 n)
<ul><li>All other scaffolds</li><li>Walkways within a scaffold</li></ul>	200 lbs. (890 n)	150 lbs. (666 n)

#### You must

- Install midrails, screens, mesh, intermediate vertical members, solid panels, or equivalent structural members as follows:
  - Midrails at a height approximately midway between the top edge of the guardrail system and the platform surface
  - Screens and mesh:
    - From the top edge of the guardrail system to the scaffold platform

#### and

- Along the entire opening between the supports
- Intermediate members, such as balusters or additional rails, not more than 19 inches (48 cm) apart.
- Make sure steel or plastic banding isn't used as a toprail or midrail.



## Rule

#### WAC 296-874-20064 (Continued)

#### You must

 Have a competent person inspect manila rope and plastic or other synthetic rope that's used as a toprail or midrail as frequently as necessary to make sure it continues to meet the strength requirements for a toprail or midrail.



#### Note:

Crossbraces may be used as a toprail or midrail in a guardrail system if they meet the following requirements:

- The crossing point of the 2 braces is between:
  - 20 inches and 30 inches above the work platform when used as a midrail
  - 38 inches and 48 inches above the work platform when used as a
- > The end points at each upright aren't more than 48 inches apart.

#### You must

- Make sure guardrails have a surface that prevents:
  - Puncture and laceration injuries

#### and

- Snagging clothing.
- Make sure any rail extending beyond the post of a guardrail doesn't create a projection hazard.

WAC 296-874-200

## Rule

#### WAC 296-874-20066

#### Provide falling object protection

#### You must

- Protect employees from being struck by tools, materials, or equipment falling from a scaffold by doing one or more of the following:
  - Use a barricade to keep employees out of the area where falling objects could be a hazard
  - Install a toeboard along the edge of the platform anywhere an object could fall on an employee below
  - Install paneling or screening that covers from the top of the guardrail to the toeboard or platform anywhere the toeboard is **not** high enough to keep objects from falling off the platform
  - Install a guardrail system with openings small enough to keep potential falling objects from passing through
  - Erect a canopy structure, debris net, or catch platform over employees that does all of the following:
    - · Will contain or deflect falling objects
    - Is strong enough to withstand the impact forces
    - Is installed between the falling object hazard and the employees.
- Make sure potential falling objects that are too large or heavy to be contained or deflected by the falling object protection you're using, are:
  - Moved away from the edge of the surface they could fall from and
  - Secured, as necessary, to prevent falling.



#### Reference:

- ➤ Hardhats and possibly other personal protective equipment has to be used to protect employees exposed to overhead hazards.
  - Those requirements are found in the Safety and Health Core Rules, Chapter 296-800 WAC. Go to the section titled Personal Protective Equipment (PPE), WAC 296-800-160.

WAC 296-874-200

## Rule

#### WAC 296-874-20068

# Provide additional support lines on suspended scaffolds using a canopy for falling object protection

#### You must

- Equip suspended scaffolds, that use a canopy for falling object protection, with additional independent support lines that meet all of the following:
  - Have the same number of support lines as there are suspension ropes
  - Are equivalent in strength to the suspension ropes
  - Aren't attached to the same point of anchorage as the suspension ropes.

#### WAC 296-874-20070

#### Make sure toeboards meet these requirements

#### You must

- Make sure toeboards, when used, are:
  - At least 3-1/2 inches (9 cm) high from the top edge of the toeboard to the platform
  - Securely fastened along the outer edge of the platform
  - Installed for enough distance along the platform to protect employees below
  - Installed so the gap between the bottom of the toeboard and the platform is
     1/4 inch (0.7 cm) or less
  - Solid or with openings that are one inch (2.5 cm) or less in the largest dimension
  - Able to withstand, without failing, a force of at least 50 lbs. (222 n) applied in a downward or horizontal direction anywhere along the toeboard.



#### Exemption:

• On float (ship) scaffolds, an edging of 3/4 x 1-1/2 inch (2x4 cm) wood or the equivalent may be used instead of a toeboard.



## Rule

#### WAC 296-874-20072

#### Train employees who work on a scaffold

- Have a qualified person train each employee who works on a scaffold to:
  - Recognize the hazards associated with the type of scaffold they are using and
  - Understand the procedures to control or minimize the hazards.
- Include the following subjects in your training:
  - Hazards in the work area and how to deal with them, including:
    - Flectrical hazards
    - Fall hazards
    - Falling object hazards
    - How to erect, maintain, and disassemble the fall protection and falling object protection systems being used
  - How to:
    - Use the scaffold
    - · Handle materials on the scaffold
  - The load-carrying capacity and maximum intended load of the scaffold
  - Any other requirements of this chapter that apply.



# Requirements

## **General Requirements for Scaffolds**

WAC 296-874-200

Rule

#### WAC 296-874-20074

## Train employees who erect, dismantle, operate or maintain scaffolds

- Have a competent person train each employee who erects, disassembles, moves, operates, repairs, maintains, or inspects scaffolds to recognize any hazards associated with the work.
- Make sure the training includes at least the following subjects:
  - Hazards in the work area and how to deal with them.
  - The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold being used
  - The design criteria, maximum intended load-carrying capacity and intended use of the scaffold
  - Any other requirements of this chapter that apply.



## Rule

#### WAC 296-874-20076

#### Retrain employees when necessary

- Retrain employees to reestablish proficiency if you believe they lack the skill or understanding to safely erect, use, or dismantle a scaffold.
- Retraining is required in at least the following situations:
  - An employee's work involving scaffolds is inadequate and indicates they lack the necessary proficiency
  - A change in **any** of the following that presents a hazard the employee hasn't been trained for:
    - Worksite
    - Type of scaffold
    - Fall protection
    - Falling object protection
    - Other equipment.